

WHAT IS CLAIMED IS:

1. An article comprising at least one adhesive layer with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface; and a cap layer in contact with a structured surface of an adhesive layer.
2. The article of claim 1, wherein the cap layer is selected from a backing, a membrane, and an adhesive layer.
3. The article of claim 1, wherein the at least one adhesive layer comprises an adhesive selected from the group consisting of pressure sensitive adhesives, epoxy adhesives, structural adhesives, bonding adhesives, and combinations thereof.
4. The article of claim 3, wherein the pressure sensitive adhesive is selected from the group consisting of acrylics, natural and synthetic rubbers, ethylene vinyl acetate, vinyl ethers, silicones, poly(alpha-olefins), and combinations thereof.
5. The article of claim 1, wherein said article has a thickness of about 2 μm to about 500 μm .
6. The article of claim 2, wherein the adhesive layers are selected from the group consisting of structured and non-structured adhesive layers.
7. The article of claim 1, further comprising at least one non-adhesive layer in contact with one of the first and second major surfaces.
8. The article of claim 1, wherein the article comprises a structured exposed surface.
9. The article of claim 1, wherein the article comprises a non-structured exposed surface.
10. The article of claim 1, wherein the article comprises a plurality of discrete reservoirs, each reservoir having a void volume of less than 100 μl .
11. The article of claim 1, wherein the article comprises a plurality of channels.
12. The article of claim 10, wherein said reservoirs contain at least one deliverable or non-deliverable substance.
13. The article of claim 11, wherein said channels contain at least one deliverable or non-deliverable substance.
14. The article of claim 12, wherein the at least one deliverable or non-deliverable substance is selected from hormones, antibiotics, antimicrobials, antifungal agents,

lotions, ointments, indicators, proteins, inks, dyes, drugs, and vibration-damping fluids.

15. The article of claim 12, wherein the at least one deliverable or non-deliverable substance is in the form selected from the group consisting of solids, liquids, gels, pastes, foams, powders, agglomerated particles, microencapsulated liquids, suspensions, and combinations thereof.

16. The article of claim 13, wherein the at least one deliverable or non-deliverable substance is selected from hormones, antibiotics, antimicrobials, antifungal agents, lotions, ointments, indicators, proteins, inks, dyes, drugs, and vibration-damping fluids.

17. The article of claim 13, wherein the at least one deliverable or non-deliverable substance is in the form selected from the group consisting of solids, liquids, gels, pastes, foams, powders, agglomerated particles, microencapsulated liquids, suspensions, and combinations thereof.

18. The article of claim 1, wherein the cap layer is a structured layer.

19. The article of claim 1, wherein the cap layer is a laminate.

20. The article of claim 1, wherein the second major surface is a non-structured surface, the cap layer contacts the first major surface, and wherein the article further comprises a backing layer on the second major surface.

21. The article of claim 1, wherein the second major surface is a structured surface, the cap layer contacts the first major surface, and wherein the article further comprises a backing layer on the second major surface.

22. A tape comprising:

(a) at least one pressure sensitive adhesive layer comprising a first major surface and a second major surface, wherein the first major surface is a structured surface and the second major surface is a non-structured surface; and

(b) a cap layer in contact with the first major surface.

23. The tape of claim 22, wherein the second major surface is a structured surface.

24. The tape of claim 22, wherein the second major surface is a non-structured surface.

25. The tape of claim 24, wherein the tape has a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches.

26. The tape of claim 22, further comprising a backing adjacent the second major surface.

1 27. The tape of claim 22, wherein the cap layer is a structured layer.

1 28. A laminate article comprising:

2 (a) first adhesive layer having a first major surface and a second major surface,
3 wherein at least one of the first and second major surfaces is a structured surface, and

4 (b) a second adhesive layer having a first major surface and a second major
5 surface, wherein at least one of the first and second major surfaces is a structured surface.

1 29. The laminate article of claim 28, wherein the first major surface of the first adhesive
2 layer is a structured surface and the second major surface of the first adhesive layer is
3 a non-structured surface, and the first major surface of the second adhesive layer is a
4 structured surface and the second major surface of the second adhesive layer is a non-
5 structured surface, and the second major surface of the first adhesive layer contacts
6 the first major surface of the second adhesive layer.

1 30. The laminate article of claim 28, further comprising a backing on the second major
2 surface of the second adhesive layer.

1 31. The laminate article of claim 28, further comprising a cap layer on the first major
2 surface of the first adhesive layer.

1 32. The laminate article of claim 28, wherein the first major surface of the first adhesive
2 layer contacts the first major surface of the second adhesive layer.

1 33. The laminate article of claim 28, further comprising a backing layer on the second
2 major surface of the first adhesive layer.

1 34. The laminate article of claim 28, wherein the first adhesive layer has a first pattern of
2 structures on the first major surface thereof and the second adhesive layer has a
3 second pattern of structures on the first major surface thereof, and wherein the first
4 pattern is substantially aligned with the second pattern.

1 35. The laminate article of claim 34, wherein the first pattern is misaligned with the
2 second pattern.

- 1 36. A method for making a pre laminate, comprising: (a) applying an adhesive to a
2 structured surface of a tool to form an adhesive layer with a structured surface and a
3 non-structured surface; (b) laminating a backing to the non-structured surface of the
4 adhesive layer to form a pre laminate; and (c) removing the pre laminate from the tool.
- 1 37. The method of claim 36, further comprising laminating a cap layer to the structured
2 surface of the pre laminate.
- 1 38. The method of claim 36, wherein the cap layer is an adhesive layer.
- 1 39. The method of claim 38, wherein the adhesive layer is a structured adhesive layer.
- 1 40. The method of claim 36, wherein the cap layer is a backing.
- 1 41. The method of claim 40, wherein the backing is structured.
- 1 42. The method of claim 36, further comprising laminating a cap layer to the structured
2 surface of the pre laminate.
- 1 43. The method of claim 42, further comprising removing the backing from the non-
2 structured surface of the pre laminate.
- 1 44. A method for making a laminate, comprising: (a) providing a first pre laminate
2 comprising a first adhesive layer with a structured first major surface and a non-
3 structured second major surface, and a cap layer contacting the first major surface of
4 the first pre laminate; and (b) providing a second pre laminate comprising a second
5 adhesive layer with a structured first major surface and a non-structured second major
6 surface, and a backing contacting the second major surface of the second pre laminate;
7 and (c) contacting the second major surface of the first pre laminate to the first major
8 surface of the second pre laminate.
- 1 45. The method of claim 44, further comprising filling a region between the first adhesive
2 layer and the second adhesive layer with at least one a deliverable and a non-
3 deliverable substance.
- 1 46. The method of claim 45, wherein the region is filled by coating.
- 1 47. The method of claim 45, wherein the region is filled under a vacuum.
- 1 48. A method for making a laminate, comprising: (a) providing a first pre laminate
2 comprising a first adhesive layer with a structured first major surface and a non-
3 structured second major surface, and a first backing layer contacting the second major
4 surface of the first pre laminate; (b) providing a second pre laminate comprising a
5 second adhesive layer with a structured first major surface and a non-structured

6 second major surface, and a second backing layer contacting the second major surface
7 of the second pre laminate; and (c) contacting the first major surface of the first
8 pre laminate with the first major surface of the second pre laminate.

1 49. The method of claim 48, further comprising filling a region between the first adhesive
2 layer and the second adhesive layer with at least one a deliverable and a non-
3 deliverable substance.

1 50. The method of claim 49, wherein the region is filled by coating.

1 51. The method of claim 50, wherein the region is filled under a vacuum. A method for
2 making a laminate, comprising: (a) providing a first pre laminate comprising a
3 structured first major surface and a non-structured second major surface; (b)
4 providing a second pre laminate comprising a first structured major surface and a
5 second non-structured major surface, and a backing layer contacting the second major
6 surface of the second pre laminate; and (c) contacting the second major surface of the
7 first pre laminate with the first major surface of the second pre laminate.

1 52. The method of claim 48, wherein the first pre laminate is formed by casting an
2 adhesive on a tool.

1 53. An article comprising at least one first layer with a first major surface and a second
2 major surface, wherein at least one of the first and second major surfaces is a
3 structured surface; and a cap layer in contact with a structured surface of the first
4 layer, wherein the cap layer comprises an adhesive.

1 54. The article of claim 53, wherein the cap layer is non-structured.

1 55. The article of claim 53, wherein the first layer comprises a polymeric film.